

## **REMARKS**

This response is submitted in reply to the Office Action mailed on September 27, 2005. Claims 1-9 are pending in this application. No new matter has been added by this response.

Claim 1-9 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,400,350 to Nishimura et al. ("Nishimura"). Applicant respectfully traverses this rejection.

Claim 1 is directed to a method for driving a Liquid Crystal Display (LCD) in a dynamic inversion manner. The method includes dividing a frame into a plurality of polarity blocks, where each of the polarity blocks covers  $2n$  horizontal scanning lines, and where  $n$  is a positive integer. The method also includes generating an original polarity inversion pattern which has positive polarities for  $n$  pixels in each column line of each polarity block and negative polarities for the other  $n$  pixels in each column line of each polarity block. The method further includes generating a polarity inversion group having  $2n$  polarity patterns which record polarity distributions obtained by rotating each row of the original polarity block under a DC balance requirement and selecting the polarity patterns in the polarity inversion group for driving the pixels.

In contrast, Nishimura is directed to a method for driving a LCD where a predetermined image is displayed by applying predetermined column signals to pixels forming selected rows of an array of pixels arranged in columns and rows. The pixels are divided to form groups where each group includes at least two pixels arranged in a column direction or a row direction. The column signals associated with each group are provided with a different polarity for each adjacent group. (See the Abstract). Nishimura, however, fails to disclose or suggest "generating an original polarity inversion pattern which has positive polarities for  $n$  pixels in each column line of each polarity block and negative polarities for the other  $n$

pixels in each column line of each polarity block” or “generating a polarity invention group having  $2n$  polarity patterns which record polarity distributions obtained by rotating each row of the original polarity block under a DC balance requirement” as in the claimed invention.

Instead, Nishimura discloses an amount of positive polarity pixels that is two times the number of negative polarity pixels in each column. Furthermore, the polarity block shown in Fig. 2(b) cannot be obtained by rotating each row of Fig. 2(a), which illustrates the polarity block of each column signal to be applied to each pixel of the LCD apparatus in the  $m$  frame. Therefore, the polarity blocks shown in Figs. 2(a) and 2(b) do not belong to the same polarity inversion group. Additionally, the method disclosed by Nishimura includes some pixels which do not switch polarities such as certain of the pixels in the polarity blocks shown in Figs. 2(a) and 2(b). Nishimura therefore does not disclose or suggest “generating a polarity inversion group . . . which record polarity distributions obtained by rotating each row of the original polarity block under a DC balance requirement” as in the claimed invention. Nishimura therefore does not disclose, teach or suggest all of the elements of claim 1.

Claim 6 includes similar elements to claim 1. Specifically, claim 6 includes “generating an original polarity pattern which has positive polarities for  $n$  pixels in each column line of each polarity block and negative polarities for the other  $n$  pixels in each column line of each polarity block” and “generating a polarity pattern which records a polarity distribution obtained by rotating  $x$  rows of the original polarity block under a DC balance requirement.” As stated above, Nishimura does not disclose, teach or suggest these elements.

Regarding dependent claims 2 and 7, the last row of the pixels shown in Fig. 2(b) of Nishimura are not shifted up from the first row shown in Fig. 2(a). Furthermore, the other rows of Fig. 2(b) cannot

be obtained by sequentially moving rows 2-12 of Fig. 2(a) to the corresponding previous rows. Nishimura therefore does not disclose or suggest the elements of claims 2 and 7.

Regarding dependent claims 3 and 8, the first row of Fig. 2(b) of Nishimura is not shifted from the last row shown in Fig. 2(a). Furthermore, the other rows of Fig. 2(b) cannot be obtained by sequentially moving rows 1-11 of Fig. 2(a) to the corresponding following rows. Nishimura therefore does not disclose or suggest the elements of claims 3 and 8.

Regarding dependent claims 4 and 9, the polarity blocks shown in Figs. 4 and 5 of Nishimura do not belong to the same polarity inversion group and therefore cannot meet the DC balance requirement of the claimed invention.


Dependent claim 5 depends from claim 1. Therefore, claim 5 is distinguishable from Nishimura for the reasons provided for claim 1 above.

For at least these reasons, claims 1 and 6, and claims 2-5 and 7-9, which depend from these claims, respectively, are each patentably distinguished over Nishimura and in condition for allowance.

In light of the above, Applicant respectfully submits that claims 1-9 are patentable over the art of record because the cited art does not disclose, teach or suggest all of the elements of the claimed invention. Accordingly, Applicant respectfully requests that claims 1-9 be deemed allowable at this time and that a timely Notice of Allowance be issued in this case.

No fees are due. If any other fees are due in connection with this application, the Patent Office is authorized to deduct the fees from Deposit Account No. 19-1351. If such withdrawal is made, please indicate the attorney docket number (33038-404700) on the account statement.

Respectfully submitted,

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